

Borough and Port  
of Sandwich.

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*Annual Report*

OF THE

Medical Officer of Health

FOR THE YEAR

1932

J. J. DAY,

O.B.E., M.R.C.S., L.R.C.P., D.P.H.





52, Whitstable Road,

Canterbury.

April, 1933.

**To the Mayor and Corporation of the Borough of  
Sandwich.**

Mr. Mayor, Ladies and Gentlemen,

I beg to submit my Report on the Health and General Sanitary Conditions of your Borough for the year 1932.

This is my fourth Annual Report, and is compiled in accordance with the requirements of Circular 1269 (England), issued by the Ministry of Health during 1932.

Certain of the information contained in the Report may appear redundant to you who are already acquainted with it. The particulars must, however, be included for the information of other Bodies not so conversant with them.

I have included detailed extracts from the Census particulars which will afford you the latest published information in regard to the Population and Housing Statistics of the Borough.

I wish once more to express my indebtedness and gratitude to the Borough Surveyor and Sanitary Inspector for their ready co-operation and assistance which have greatly facilitated the performance of my duties.

I am,

Your obedient Servant,

J. J. DAY,

Medical Officer of Health.

## NATURAL AND SOCIAL CONDITIONS OF THE BOROUGH.

The Municipal Borough of Sandwich comprises the following Civil Parishes:—

Civil Parishes.	Area in acres inclu- ding inland water.	Populn. Census 1921.	Census 1931.
St. Bartholomew's Hospital	6	49	41
St. Clement	536	1040	971
St. Mary	126	1161	1425
St. Peter	40	911	850
Sandwich M. B.	708	3161	3287

### PHYSICAL FEATURES AND GENERAL CHARACTER OF THE BOROUGH.

Only a comparatively small portion of the total area of the Borough is built over.

The Borough is bounded on the North by the River Stour, and surrounded by the Rural District of Eastry on the South, East and West.

### GEOLOGICAL PARTICULARS.

A continuous thick bed of Chalk underlies the surface formation, and rests on a thinner bed of Gault Clay, under which is a bed of Greensand of varying thickness. This overlies a layer of Wealden formation, immediately below which, in adjoining districts, is a wedge of Jurassic rocks. It is doubtful whether the Jurassic layer extends below Sandwich. Below the Jurassic is a massive bowl shaped block of the Coal Measures (Transitional and Middle); Sandwich lies over the thinning North-Eastern edge of this deposit.

The surface formation is Alluvium of varying thickness, mainly Clayey with patches of Sand and Shingle.

The area of the Borough is low-lying, gently undulating ground. As shown in the Ordnance map of the Borough, the highest Bench Mark in the built over area is 27.8 feet O.D. in the vicinity of St. Clement's Church, the lowest 10.1 feet O.D. in the neighbourhood of the Schools, while another of 10.5 feet O.D. is in Moat Sole.

Round the borders of the built up area the levels are shown as follows: East, Sandown Road, 14.4 feet O.D.; Vigo Nursery, 17 feet O.D.; South, St. Bartholomew's, 17.4 feet O.D.; Puttock's Down, 13.3 feet O.D.; West, Boatman's Hill (lowest), 11 feet O.D.; (highest) 20.8 feet O.D.; Butts, 13 feet O.D.; Ash Road, 11 feet O.D.

The level of the sub-soil water is high, water being reached in very shallow excavations.

## **SOCIAL CONDITIONS AND CHIEF OCCUPATIONS OF INHABITANTS.**

Sandwich is a market town surrounded by an agricultural area, and close to important colliery developments. The main industry is a tannery situated on the western side of the Borough. Roughly, 10 per cent. of those employed are engaged in agricultural work, 10 per cent. in various kinds of transport work, 13 per cent. in commercial work, 20 per cent. in personal service, and the remainder in other varying employment.

## **HOUSING CONDITIONS, YEAR ENDED 31st DECEMBER, 1932.**

### **General Statistics.**

Area (acres), 708.

Population (Census, 1931, 3,287), estimated 1932, 3,344.

Number of inhabited houses (end of 1932) according to Rate Books, 942.

Rateable value, £19,422.

Sum represented by a penny rate, £73:9:11.



## **1.—Unfit Dwelling-houses.**

Inspection :—

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts), 199. Number of inspections made for the purpose, 313.

(2) Number of dwelling-houses which were inspected and recorded under the Housing Consolidated Regulations, 1925, 172. Number of inspections made for the purpose, 283.

(3) Number of dwelling-houses found to be in a state so dangerous, or injurious to health, as to be unfit for human habitation, 1.

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation, 47.

## **2.—Remedy of defects without Service of formal Notices.**

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers, 45.

## **3.—Action under Statutory Powers.**

(a) Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs, 3.

(2) Number of dwelling-houses which were rendered fit after service of formal notices: (a) by owners, 3, (b) by local authority in default of owners, nil.

(b) Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied, 27.

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(a) By owners, nil.

(b) By Local Authority in default of owners, nil.

(c) Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—

(1) Number of dwelling-houses in respect of which Demolition Orders were made, nil.

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders, nil.

(d) Proceedings under Section 20 of the Housing Act, 1930 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made, nil.

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit, nil.

(e) Proceedings under Section 3 of the Housing Act, 1925 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs, nil.

(2) Number of dwelling-houses which were rendered fit after service of formal notices :—

(a) By owners, nil.

(b) By Local Authority in default of owners, nil.

(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close, nil.

(f) Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—

(1) Number of dwelling-houses in respect of which Closing Orders were made, nil.

(2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-house having been rendered fit, nil.

(3) Number of dwelling-houses in respect of which Demolition Orders were made, nil.

(4) Number of dwelling-houses demolished in pursuance of Demolition Orders, nil.

(5) Total number of houses owned by the Local Authority, 113.

(6) Number of new houses built during 1932:—

(a) By the Local Authority, nil.

(b) By other bodies or persons, 1.

(7) Shortage of housing accommodation for working classes:—

Houses required (a) to replace unsatisfactory property, 6; (b) to provide additional accommodation, 12.

The remarks I made in my Report for 1931 still hold good. There are some half-dozen premises of an unsatisfactory nature in the Borough which should be replaced. There is also a small genuine demand from families at present residing in lodgings for suitable houses at a moderate rental. The number estimated above (12) would probably meet this demand. Private enterprise appears unwilling to provide such dwellings, and it would seem that the Council will have to do so.

I pointed out last year that there is a considerable demand for houses of a more modern type than many at present occupied in the Borough. This demand does not indicate any shortage of accommodation, but merely a desire for modern amenities, and may well be left for private enterprise to deal with.

### **Fitness of Houses.**

The process of gradual re-conditioning of defective premises in the Borough is being continued, and during the year a considerable number of improvements have been effected. Owners of property are co-operating willingly in most instances in carrying out the alterations and repairs suggested.

The sanitary arrangements of the Borough are being steadily improved. Since the date of my last Report 98 pail closets have been converted to the water carriage system, and four cesspools have been abolished.



## GENERAL STATISTICS.

### Area and Population.

District.	Area in acres including inland water.	Population Estimated by Registrar General 1932		
		Census 1931	For Birth Rate.	For Death Rate.
Sandwich M. B.	708	3287	3344	3344

The above table gives the working figures by which are calculated the rates for the purpose of this Report.

Below are detailed extracts from the particulars revealed by the Census.

### A.—Local Age and Condition Distribution.

Area	Average Age		Number of Married Women aged less than 45 per 1000 Females of all Ages	Number of Females per 1000 Males
	Males	Females		
Sandwich M.B.	34·1	35·8	230	1047
Kent Admin. County	32·6	34·6	235	1087

### B.—Population 1911-1931 and Inter-Censal Variations.

Area	Population.							Increase or Decrease (—)				
	1911	1921			1931			1911-21	1921—1931			
	Persons	Persons	Males	Females	Persons	Males	Females	Per Cent.	Amount	Per Cent.		
										Total	By Births over Deaths	By Migration
Sandwich M.B.	3040	3161	1535	1626	3287	1606	1681	4·0	126	4·0	4·2	—0·2

C.—Acreage, Population, Private Families and Dwellings.

ADMINISTRATIVE AREA.	Aoreage (Land and Inland Water)	TOTAL POPULATION					PRIVATE FAMILIES AND DWELLINGS, 1931				
		1921	1931				Private Families	Popula- tion in Private Families	Struc- turally Separate Dwell- ings occupied	Rooms occupied	Persons per Room
		Persons	Persons	Males	Females	Persons per Acre					
Sandwich M.B.	708	3161	3287	1606	1681	4.6	909	3129	866	4348	0.72
<i>Civil Parishes :</i>											
St. Bartholomew's Hospital	6	49	41	11	30	6.8	17	41	17	90	0.46
St. Clement	536	1040	971	477	494	1.8	251	880	239	1332	0.66
St. Mary	126	1161	1425	723	702	11.3	395	1365	379	1770	0.77
St. Peter	40	911	850	395	455	21.3	246	843	231	1156	0.73

D.—Comparison of Census and Resident Populations.

ADMINISTRATIVE AREA	ENUMERATED POPULATION, 1931		Enumerated in the Area, but resident elsewhere in England and Wales		Resident in the Area, but enumerated elsewhere in England and Wales		Excess or Deficiency (—) of Residents in relation to enumerated		Per 1000 enumera- ted
	Persons	Males	Females	Males	Females	Males	Females	Persons	Persons
Sandwich M.B....	3287	1606	1681	56	56	46	76	10 — 10	20

E.—Dwellings, Rooms and Families.

	STRUCTURALLY SEPARATE DWELLINGS OF									NUMBER OF ROOMS		
	1 Room	2 Rooms	3 Rooms	4 Rooms	5 Rooms	6—8 Rooms	9 or more Rooms	All sizes	Total	Occu- pied	Vacant	
	b	c	d	e	f	g	h	i	j	k	Furn- ished	Others
—												
Cols. a												

SANDWICH M.B.

Dwellings occupied by 1 private family ...	3	39	64	210	335	145	37	833	4138	4117	4	17
Dwellings occupied by 2 private families ...	—	—	1	4	8	9	3	25	173	168	1	4
Dwellings occupied by 3 or more private families ...	—	—	—	—	—	6	2	8	63	63	—	—
Total dwellings occupied	3	39	65	214	343	160	42	866	4374	4348	5	21
Dwellings wholly furnished	—	—	2	4	6	3	1	16	85	—	85	—
vacant { others	—	—	6	6	4	6	2	24	141	—	—	141
Total dwellings occupied & vacant	3	39	73	224	353	169	45	906	4600	4348	90	162
Number of private families therein	3	39	66	218	351	182	50	909	—	—	—	—

Miscellaneous habitations and institutions housing non-private families

...

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F.—Private Families, Classified by Size of Family, Rooms Occupied, and Density of Occupation.

NUMBER OF PERSONS IN FAMILY		NUMBER OF PRIVATE FAMILIES OCCUPYING THE FOLLOWING NUMBER OF ROOMS.										Total Private Families	Popula- tion in Private Families	Rooms Occu- pied	DENSITY OF OCCUPATION.				
															Average Number of Per- sons per Room	Population at following densities of occupation (Persons per Room)			
																over 3	3 and over 2	2 and over 1½	1½ and over 1
Cols. a		b	c	d	e	f	g	h	j		k	l	m	n	o	p	q	r	
SANDWICH M.B.																			
1	...	13	22	7	16	12	9	3	2	84	84	306	0·27	—	—	—	—	—	
2	...	5	19	17	53	82	34	7	2	219	438	1016	0·43	—	—	—	10	—	
3	...	3	14	19	51	90	28	11	2	218	654	1037	0·63	—	—	9	—	42	
4	...	1	4	15	42	78	24	8	5	177	708	890	0·80	4	—	—	16	60	
5	...	—	1	11	25	45	19	6	1	108	540	545	0·99	—	—	5	55	125	
6	...	—	2	6	19	15	5	2	4	53	318	268	1·19	—	—	12	36	204	
7	...	—	—	1	7	14	4	2	3	31	217	179	1·21	—	—	7	49	112	
8	...	—	1	—	1	5	2	—	—	9	72	44	1·64	8	—	—	48	16	
9	...	—	—	1	2	1	1	—	—	5	45	22	2·05	—	—	27	9	9	
10	...	—	—	1	2	—	—	—	—	3	30	11	2·73	10	—	20	—	—	
11	...	—	—	—	—	—	1	—	—	1	11	6	1·83	—	—	—	11	—	
12	...	—	—	—	—	—	—	—	1	1	12	22	0·55	—	—	—	—	—	
13	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
14	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
15 and over	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2 Persons and over		9	41	71	202	330	118	36	18	825	3045	4040	0·75	22	80	—	234	568	
Total Private Families		22	63	78	218	342	127	39	20	909	—	—	—	—	—	—	—	—	
Population in Private Families		36	143	275	777	1220	446	138	94	—	3129	—	0·72	22	80	—	234	568	
Rooms occupied		22	126	234	872	1710	805	328	249	—	—	4346	—	—	—	—	—	—	

Of the 158 persons enumerated by the Census who are not included in the above table 149 were returned as resident in Hotels, Boarding Houses, Lodging Houses, etc., while the remaining 9 were returned as resident in Schools, etc.



**C. — Ages (Grouped) and Marital H.—Ages (Individual Years) under 21.**

		SANDWICH M.B.				AGE LAST BIRTH- DAY	SANDWICH M.B.	
		Total Population		Married only			Males	Females
		Males	Females	Males	Females			
Total ...		1606	1681	742	731	0—21	540	521
Marital Conditions								
Single ...		793	773	—	—	0	25	28
Married ...		742	731	742	731	1	21	29
Widowed ...		71	175	—	—	2	24	20
Divorced ...		—	2	—	—	3	24	14
Ages (last birthday)						4	20	25
0—4 ...		114	116	—	—	5	33	31
5—9 ...		138	124	—	—	6	32	22
10—14 ...		137	150	—	—	7	29	19
15—19 ...		125	111	—	3	8	22	28
20—24 ...		109	115	17	37	9	22	24
25—29 ...		108	110	57	67	10	39	48
30—34 ...		119	120	84	93	11	35	39
35—39 ...		118	123	98	100	12	22	22
40—44 ...		113	121	96	87	13	16	20
45—49 ...		108	124	91	92	14	25	21
50—54 ...		107	100	86	77	15	29	22
55—59 ...		92	91	76	62	16	22	18
60—64 ...		73	82	54	49	17	26	27
65—69 ...		63	62	42	22	18	30	25
70—74 ...		51	66	29	25	19	18	19
75—79 ...		16	36	6	11	20	26	20
80—84 ...		9	19	4	5			
85—89 ...		5	9	2	1			
90—94 ...		1	2	—	—			
95 and over...		—	—	—	—			

It will be observed that Table A bears out the statement that Sandwich is an “old” town. The average age of the inhabitants is well above that of the population of the county as a whole. The proportion of potentially fertile married women is below that for the county, as is the proportion of females to males.

Table B indicates a tendency for the population to decrease by migration.

Table C shows a marked re-distribution of the population due to housing development.

Table D is of some importance inasmuch as for the first time it is possible to arrive at the actual popula-

tion of the Borough as opposed to that enumerated at the Census. It will be seen that while 112 persons enumerated were actually resident elsewhere, 122 enumerated elsewhere were really inhabitants of Sandwich. The actual population of the Borough was 3,297 (males 1,596; females, 1,701) as opposed to 3,287 (males, 1,606; females, 1,681) enumerated.

Table E is of interest from the point of view of the housing question, and should be studied in conjunction with Table F. From the latter it will be noted that at the date of the Census, 22 persons were living at a density of over 3 to a room, 80 at a density of from 2 to 3 in a room, 234 at a density of from  $1\frac{1}{2}$  to 2 to a room, and 568 at a density of from 1 to  $1\frac{1}{2}$  to a room. Thus 904 persons were living at a density of more than 1 to a room. The average density of occupation for the Borough is 0.72 to a room, which is slightly better than the average density for the County, 0.73 to a room. A comparison of the Census figures for 1921 and 1931 shows that in the ten years there was an increase of 128 or 17.34 per cent. in the number of occupied dwellings, while in the same period there was an increase of 117 or 14.77 per cent. in the number of private families. There were 24 vacant unfurnished dwellings at the date of the Census. There is a drop in the average number of rooms per occupied dwelling from 5.37 in 1921, to 5.02 in 1931, and in the average number of rooms occupied per family from 5.01 in 1921, to 4.78 in 1931. There is a slight fall in the average number of families per occupied dwelling from 1.07 in 1921 to 1.05 in 1931. There is also a considerable fall in the average size of the family from 3.87 in 1921 to 3.44 in 1931. Fifteen families, comprising 102 members or 3.26 per cent. of the population were living at a density of more than 2 to a room compared with 136, or 4.44 per cent. of the population, who were similarly situated in 1921. In other words the general housing conditions of the Borough have been substantially improved during the decade.

Table G indicates a higher proportion of married persons in the Borough than in the County as a whole, while Table H as might be expected from Table A shows a lower proportion of persons aged from 0-21 years in the Borough than in the County as a whole.

**VITAL STATISTICS.****Births.**

All particulars regarding the births in the Borough during the year are shown in the table below:—

District	Estima- ted Popu- lation	BIRTHS					Birth Rate	Illegiti- mate Births % of Total Births
		Legitimate		Illegitimate		Total		
		Male	F'm'le	Male	F'm'le			
Sandwich M. B.	3344	21	21	2	1	45	13.4	6.6 %
Birth Rate England and Wales 15.3 per 1000 popn.								

There is again a fall in the Birth Rate, which is below that for the country as a whole.

**Deaths.**

The corrected number of deaths among inhabitants of the Borough during the year was 51, 24 males and 27 females, producing a crude death rate of 15.2 per 1,000 population. This is below the rate for 1931, but above the rate for the country as a whole.

DEATHS				
District	Year	Population Estimated	Total Deaths	Death Rate per 1000 popn.
Sandwich M. B.	1932	3344	51	15.2
Death Rate, England & Wales 12.0 per 1000 popn.				

An examination of the table showing the causes of death reveals that during the year there were 4 deaths from Tuberculosis, and that the deaths from respiratory diseases were low. The deaths from Cancer were 8, and there were 15 deaths from Cerebral Hæmorrhage, Heart Disease, and Arterio-Sclerosis.



# Causes of Death in Year 1932.

Causes of Death	Males.	Females.
All Causes ... ..	24	27
1. Typhoid and Paratyphoid Fevers ... ..		
2. Measles ... ..		
3. Scarlet Fever ... ..		
4. Whooping Cough ... ..		
5. Diphtheria ... ..		
6. Influenza ... ..	2	2
7. Encephalitis Lethargica ... ..		
8. Cerebro-Spinal Fever ... ..		
9. Tuberculosis of Respiratory System ... ..	2	
10. Other Tuberculous Disease ... ..	1	1
11. Syphilis ... ..		
12. General Paralysis of the Insane Tabes Dorsalis		
13. Cancer, Malignant Disease ... ..	5	3
14. Diabetes ... ..		
15. Cerebral Hæmorrhage, Etc. ... ..		1
16. Heart Disease ... ..	6	4
17. Aneurysm ... ..		
18. Other Circulatory Diseases ... ..	2	2
19. Bronchitis ... ..		1
20. Pneumonia (All Forms) ... ..		2
21. Other Respiratory Diseases ... ..		
22. Peptic Ulcer ... ..	1	
23. Diarrhœa, Etc. (under two years) ... ..		
24. Appendicitis ... ..		
25. Cirrhosis of Liver ... ..		
26. Other Diseases of Liver, etc. ... ..		
27. Other Digestive Diseases ... ..		2
28. Acute and Chronic Nephritis ... ..	1	
29. Puerperal Sepsis ... ..		
30. Other Puerperal Causes ... ..		
31. Congenital Debility, Premature Birth, Malfor- mation, Etc. ... ..		2
32. Senility ... ..	3	6
33. Suicide ... ..		
34. Other Violence ... ..		1
35. Other Defined Diseases ... ..	1	
36. Causes Ill-defined or Unknown ... ..		
Special Causes (included in No. 35 above) ... ..		
Small-pox ... ..		
Poliomyelitis ... ..		
Polioencephalitis ... ..		



Infantile Mortality Rate.

The table following shows the particulars in regard to this rate:—

District	BIRTHS					DEATHS under 1 year					Infantile mortality rate per 1000 Births
	Legiti'te		Ill'g'mte		To-tal	Legiti'te		Ill'g'mte		To-tal	
	M.	F.	M.	F.		M.	F.	M.	F.		
Sandwich M. B.	21	21	2	1	45	—	1	—	1	2	44.4
England and Wales Infantile Mortality Rate 65 per 1000 Births.											

This rate is satisfactory. The cause of death in the two cases registered was prematurity of birth.

The number of women dying in, or in consequence of, childbirth, was: From sepsis, nil; from other causes, nil.

Deaths from measles (all ages), nil; deaths from whooping cough, nil; deaths from diarrhœa (under 2 years of age), nil.

INFECTIOUS DISEASES.

Twenty-two cases of notifiable diseases occurred during the year. The following table shows the quarterly incidence of these:—

1932 Table showing Quarterly Incidence of Infectious Diseases Notified															
Sandwich M.B.		Scarlet Fever	Diphtheria	Enteric Fever	Pneumonia	Puerp. Fever	Enceph. Letharg.	Dysentery	Ophthalm. Neonatorum	Puerp. Pyrexia	Erysipelas	Total	T.B. Lungs	T.B. Other	Grand Total
1st Quarter		1	—	—	1	—	—	—	—	—	—	2	1	—	3
2nd „		1	—	—	—	—	—	—	—	—	1	2	1	—	3
3rd „		7	—	1	1	—	—	—	—	—	—	9	—	1	10
4th „		3	—	—	2	—	—	—	—	—	—	5	—	1	6
Total for Year		12	—	1	4	—	—	—	—	—	1	18	2	2	22

**Scarlet Fever.**

There was a fall in the number of cases notified (12 as opposed to 19 in 1931). All the cases were mild in type, 2 being of doubtful nature.

**Diphtheria.**

No cases occurred.

**Pneumonia.**

Four cases only were notified.

**Enteric Fever.**

The case notified was one of Para-typhoid fever. No definite source of infection was traced, but the disease was undoubtedly not contracted in the Borough.

**Tuberculosis.**

Four cases only were notified.

Cases of Tuberculosis Remaining on Register Sandwich M.B., December 31st, 1932.			
Male		Female	
Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
6	5	16	3

1932 Table showing age periods, etc., of cases of Infectious Diseases notified															
Disease	Age Period												Total	Admitted to Hospital	Deaths
	0	1	2	3	4	5	10	15	20	35	45	65			
Scarlet Fever	—	—	—	—	2	5	1	1	2	1	—	—	12	11	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	—	—	—	—	—	—	—	—	1	—	2	1	4	—	2
Enteric Fever	—	—	—	—	—	—	—	—	1	—	—	—	1	1	—
Erysipelas	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—

## TUBERCULOSIS NOTIFICATIONS, ETC., 1932.

Age Periods	New Cases Notified				Deaths							
					Notified Cases				Non-notified Cases			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	1	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—
15	—	—	1	—	—	—	—	1	—	—	1	—
20	—	—	—	—	1	—	—	—	—	—	—	—
25	—	1	—	—	—	—	—	—	—	—	—	—
35	—	—	—	—	—	—	—	—	—	—	—	—
45	—	1	—	—	1	—	—	—	—	—	—	—
55	—	—	—	—	—	—	—	—	—	—	—	—
65&over	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2	2	—	2	—	—	1	—	—	1	—

**HOSPITALS.****Infectious Diseases.**

Cases of infectious diseases are removed to the Isolation Hospital of the Eastry Rural District Council, situate at Eastry. This Hospital is arranged for the treatment of scarlet fever and diphtheria.

**Beds.**

Scarlet Fever.—5 male, 5 female, 1 crib, 1 observation bed; total, 12.

Diphtheria.—5 male, 5 female, 2 cribs, 2 observation beds, total 14.

Plans for the enlargement of the Hospital were approved by the Ministry of Health, but owing to the financial situation, the project has been temporarily deferred. Arrangements have been made to accommodate any overflow cases of infectious diseases at the Bridge Rural District Hospital at Bekesbourne.

### **Small-pox.**

Arrangements have been made for the removal of cases of this disease to the Joint Hospital, situated at Hammill, in the Eastry Rural District. This Hospital has 22 beds, 11 male, and 11 female.

### **General.**

Cases requiring hospital treatment are largely dealt with at the Kent and Canterbury Hospital, situated at Canterbury. This Hospital has 120 beds, allocated as follows:—

General Beds.—Medical: Male, 9; female, 14; children, 7. Surgical: Male, 31; female, 27; children, 13.

Special Beds.—Maternity, complicated cases only, 2. Ophthalmic, male, 3; female, 4. Ear, nose and throat, male, 5; female, 4. Isolation, 1.

Cases are also sent to the Victoria Hospital, Deal, which has 35 beds, mainly used for surgical cases. Both Hospitals have efficient x-ray apparatus. The Canterbury Hospital has also special Orthopædic, Dental and Ophthalmic Departments, and there is a trained masseuse on the staff. There appears to be no difficulty in obtaining hospital accommodation in time of need.

### **Maternity and Nursing Homes.**

There are none in the Borough.

### **Maternal Mortality, Etc.**

Cases are followed up and reported to the County Medical Officer.

### **Institutional Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.**

No special provision has been made.

### **Institutional Provision, if any, for the case of Mental Defectives.**

No special provision has been made.



### **Ambulance Facilities.**

(a) For infectious cases. Cases are removed by the Eastry Motor Ambulance:

(b) For non-infectious and accident cases. The Borough possesses an efficient motor ambulance.

### **WATER SUPPLY.**

The water supply is derived from the Corporation's Waterworks, situated at Drainless Drove, Woodnesborough, in the Eastry Rural District.

For some time past I have been anxious in regard to the supply. While the reports of chemical analyses were invariably favourable, yet bacteriological reports showed undoubted evidence of slight sewage fouling. As these unfavourable bacteriological reports continued despite thorough cleansing of the reservoirs you decided on installing a chlorinating plant at the Water Works. This plant has been in operation since November, 1932, and the bacteriological reports are now quite satisfactory.

I wish to emphasize, however, that chlorination of the supply is not all that is necessary. No steps should be left untaken to endeavour to prevent contamination of the supply. There are a number of cesspools in close proximity to the well. While these are undoubtedly constructed in complete accordance with the requirements of the Byelaws so as to be impervious, yet there is always risk of leakage or overflow. In my opinion it would be advisable for you to undertake the complete supervision of these cesspools, as in the case of Margate in regard to the cesspools in the vicinity of their well at Wingham. Below are reports of recent analyses, both chemical and bacteriological, of the water.

County Analyst's Laboratory,  
Sessions House, Maidstone.

2nd July, 1932.

Lab. ref. 8475b.

Description of sample. Reservoir Beacon Hill, 23/6/32.

					Parts per 100,000.
Total solid residue	...	...	...	...	43.0
Chlorine	...	...	...	...	3.3
Free Ammonia	...	...	...	...	0.0
Albuminoid Ammonia	...	...	...	...	0.0
Nitrogen as Nitrates	...	...	...	...	0.1
Oxygen absorbed, $\frac{1}{4}$ hour at 80°F.	...	...	...	...	0.009
Oxygen absorbed, 4 hours at 80°F....	...	...	...	...	0.024
Nitrites	...	...	...	...	Absent

Remarks.—This water is of excellent organic quality.

(Signed) F. W. F. ARNAUD,  
Public Analyst for the County of Kent.

Sessions House, Maidstone.

August 16th, 1932.

Dear Sir,

The following report shows the result of the examination of the sample of water recently received at the laboratory.

Yours faithfully,

(Signed) ALFRED GREENWOOD.

To Dr. Day,

52, Whitstable Road, Canterbury.

Sample received August 9th. Result forwarded August 16th. Lab. No. W.15850. Description: Water from tap at Drivers House No. 1, Sandwich.

---

Result of examination:—

Number of Organisms per c.c. capable of growth in 48 hours	On Agar at 37.5° C.	On Gelatine at Room Temperature in 6 days	
	5	Liquefying 0	Total 5

McConkey's Bile Salts Glucose Broth.

Number of Tests				Acid & Gas	Acid	No Growth
Tubes 0.01 c.c. water						
Ten	„	0.1	c.c. „	0	0	10
Ten	„	1.0	c.c. „	4	2	4
Four	„	10.0	c.c. „	3	1	0
One	„	50.0	c.c. „	1	0	0

**Other Tests.**

B. coli.—3 B. coli present in 40ccs. of this water.

(Signed) CONSTANT PONDER.

Sessions House, Maidstone.

Dear Sir,

December 5th, 1932.

The following report shows the result of the examination of the sample of water recently received at the laboratory.

Yours faithfully,  
(Signed) ALFRED GREENWOOD.

To Dr. Day,

52, Whitstable Road, Canterbury.

Sample received November 29th. Result forwarded December 5th. Lab. No. W.23337. Description: Water from reservoir, Beacon Hill.

## Result of examination :—

Number of Organisms per c.c. capable of growth in 48 hours	On Agar at 37.5 C.	On Gelatine at Room Temperature in 6 days	
	0	Liquefying 1	Total 3

## McConkey's Bile Salts Glucose Broth.

Number of Tests		Acid & Gas	Acid	No Growth
Tubes 0.01 c.c. water				
Ten	„ 0.1 c.c. „	0	0	10
Ten	„ 1.0 c.c. „	0	0	10
Four	„ 10.0 c.c. „	0	0	4
One	„ 50.0 c.c. „	0	0	1

**Other Tests.**

B. Coli was absent from 100 ccs. of this water.

(Signed) CONSTANT PONDER.

**RIVERS AND STREAMS.**

The sewage of the Borough is discharged, untreated, into the River Stour. Samples of the river water have been taken regularly and submitted for analysis. Dilution is ample, and the river appears capable of dealing with the sewage without nuisance arising. I append reports from the County Analyst showing the results of analyses.



F. W. F. Arnaud, F.I.C.

County Analyst's Laboratory,  
Sessions House, Maidstone.

20th September, 1932.

Dear Sir,

Lab. Ref. 9493b.

I have examined the four waters taken from the River Stour on the 8th instant between 6.15 and 6.35 a.m. High water occurred at 5.41 a.m. I have obtained the following results, which are expressed in parts per 100,000:—

	1 Midstream Gosshall Sluice.	2 Guestling Estuary.	3 Sandwich Bridge.	4 North Stream Estuary
Total dissolved solids ...	74.0	127.5	141.5	165.5
Total suspended solids ...	8.0	6.8	5.2	5.8
Organic suspended solids	1.5	1.5	1.1	1.7
Chlorine ...	21.6	47.6	54.7	65.7
Free Ammonia ...	0.020	0.020	0.024	0.024
Albuminoid Ammonia ...	0.020	0.032	0.020	0.024
Oxygen absd. (acid per- manganate $\frac{1}{4}$ hour) ...	0.12	0.14	0.12	0.10
Oxygen absd. (acid per- manganate 4 hours) ...	0.26	0.26	0.25	0.26
Nitrogen as nitrates ...	0.1	0.1	0.1	0.1
Nitrogen as nitrites ...	Faint trace	Faint trace	Faint trace	Faint trace
Dissolved oxygen absd. in 5 days ...	0.122	0.26	0.16	0.29

The organic quality of the water taken highest up the river, and at the Gosshall Sluice, is similar to the other waters. The quality of all four waters is similarly bad, and shows evidence of sewage pollution. The river water should be capable of dealing with the organic matter in solution.

Yours faithfully,

F. W. F. ARNAUD,

County Analyst.

F. W. F. Arnaud, F.I.C.

County Analyst's Laboratory,  
Sessions House, Maidstone.

14th December, 1932.

Dear Sir,

Lab. Ref. 648c.

I have examined the four samples of water taken from the River Stour on the morning of the 5th instant. The samples were taken at low water. On analysis I have obtained the following results, which are expressed in parts per 100,000:—

	1 At Sewer out- fall, midway between Gossall Sluice and Guestling Estuary	2 At Guestling Estuary	3 At Sandwich Bridge	4 At Estuary of North Stream
Total dissolved solids ...	434.0	476.0	454.5	494.0
Total suspended solids ...	1.5	1.2	1.7	1.9
Organic „ „ ...	0.20	0.30	0.40	0.40
Chlorine ...	199.0	214.0	209.0	232.0
Free Ammonia ...	0.032	0.032	0.032	0.032
Albuminoid Ammonia ...	0.020	0.012	0.016	0.012
Oxygen absd. (acid per- manganate) $\frac{1}{4}$ hour ...	0.117	0.109	0.094	0.070
Oxygen absd. (acid per- manganate) 4 hours ...	0.211	0.195	0.189	0.125
Nitrogen as nitrates ...	0.1	0.1	0.1	0.1
Nitrogen as nitrites ...	Trace	Trace	Trace	Trace

These waters were all odourless, and only slightly turbid. The organic quality of all four was bad, and was similar, no sample showing markedly more contamination than the others.

Yours faithfully,

F. W. F. ARNAUD,

County Analyst.

## **DRAINAGE AND SEWERAGE.**

The drainage scheme put into operation during last year is working satisfactorily. The serious pollution of the Delf and Guestling has been remedied, and no complaint has been made in regard thereto.

## **CLOSET ACCOMMODATION.**

There are in the Borough:—

Water Closets:

(a) Into drainage system, 945.

(b) Into cesspools, 9.

Earth closets and privy middens, nil.

Pail closets, 25.

## **SCAVENCING.**

The domestic refuse is collected and removed to a site belonging to the Corporation on the Sandwich-Ash Road.

The collection and disposal is constantly supervised. No further steps have been taken in regard to the adoption of "controlled tipping." I am not altogether satisfied in regard to the condition of the refuse dump on occasions. At times there are large accumulations of refuse which are both unsightly and offensive. The matter might well be re-investigated with a view to finding a more satisfactory method or place of disposal.

## **SANITARY ADMINISTRATION.**

The following is a summary of the work of the Sanitary Department, and action taken under the Public Health Acts or Byelaws during the year:—

### **Adoptive Acts in Force.**

Public Health Acts (Amendment) Act, 1890.

Section 50, Public Health Act, 1907, Motor Ambulance.

### **Public Health Staff.**

This consists of the Medical Officer of Health and one whole-time Sanitary Inspector.

### **Sandwich M.B., 1932.**

Number of Inspectors of Nuisances, 1 whole-time, nil part-time.

Total number of visits paid by Inspector during the year, 884.

Places Inspected	No. in District	No. of Visits in 1932	No. of Faults & Defects Found	No. of Faults & Defects Remedied
Bakehouses ... ..	5	12	2	2
Dairies... ..	9	19	2	2
Slaughter Houses { Registered	2	320	2	2
{ Licensed	Nil			
Other food preparing places, which are, as such, subject to inspection	7	15	2	2
Offensive Trades ...	1	2	2	2
Common Lodging Houses	1	2	0	0
Houses let in Lodgings ...	—	—	—	—
Factories ... ..	13	17 12 7	3 1 —	3 1 —
Workshops ... ..	15			
Workplaces .. ..	10			
(Other than Outworkers' Homes) ... ..	—			
	38	36		

Nuisances and defects remedied during the year (other than those enumerated in the above tabulation):

Over-crowding ... ..	1
Keeping of animals ... ..	—
Hop-pickers' camps ... ..	—
Sanitary accommodation—	
(a) Insufficient ... ..	5
(b) Defective ... ..	5
Drainage—	
(a) Re-constructed ... ..	1
(b) Repaired ... ..	7
(c) Cleansed ... ..	1
Cesspools—	
(a) Abolished ... ..	1
(b) Repaired ... ..	—
Offensive accumulations ... ..	5
Refuse receptacles ... ..	11
Tents, vans and sheds ... ..	—
Smoke nuisances ... ..	1



Yard paving	...	...	...	—
Dampness	...	...	...	2
Roofs and rain water pipes	...	...	...	20
Floors	...	...	...	7
Walls and ceilings	...	...	...	3
Windows and ventilation	...	...	...	5
Baths, lavatory basins and sinks	...	...	...	25
Water supplies	...	...	...	2
Miscellaneous	...	...	...	6

Number of premises containing each type of sanitary conveniences in district (approximate)				
W.C.'s.—				
(a) into Drainage system	...	...	...	945
(b) into Cesspools	...	...	...	9
Earth Closets or Privy Middens	...	...	...	Nil
Pail Closets	...	...	...	25

Notices served (a) Statutory, 4; (b) informal, 72.

Number of premises disinfected, 16; number of batches of clothing, etc., disinfected, 1.

The **Bakehouses** (5) and **Dairies** (9) in the Borough were visited during the year, and the minor defects found dealt with.

### **Slaughter Houses.**

There are two registered and no licensed private slaughter houses in the Borough. Three hundred and twenty visits were paid during the year. Very few defects were found, and those are being remedied. Approximately  $11\frac{1}{4}$  cwts. of unsound meat were condemned during the year.

### **Sale of Food and Drugs Act.**

Action is taken by the Police.

The **Factories, Workshops and Work-places** were regularly inspected and found to be in satisfactory sanitary condition and well conducted.

### **Disinfection of Infected Articles.**

This is carried out by the Sanitary Inspector. The Council does not possess a steam disinfecter.

### **Schools.**

The sanitary condition and water supply of the Elementary Schools is satisfactory. There was no un-

usual outbreak of disease among the scholars in attendance during the year. Their health and physique is quite up to the normal.

### SANITARY INSPECTOR.

Mr. Kendall, the Sanitary Inspector, has put in a year of highly satisfactory work. The summary of his report, which I include, will afford evidence of his close attention to his duties. That so many improvements in the general condition of the Borough have been effected without recourse to legal measures speaks volumes for his tact. I wish to put on record my appreciation of his unfailing co-operation and assistance in the performance of my duties.

### PORT AND HAVEN OF SANDWICH.

#### Annual Report of the Medical Officer of Health for the Year 1932.

To the Conservators of the Port and Haven of Sandwich.  
Gentlemen,

I have to report as follows for the year 1932:—

#### A.—Amount of shipping entering the Port during the year 1932.

	Number	Tonnage	Number Inspected		Number reported to be defective	Number of Vessels on which defects were remedied	Number of Vessels reported as having, or having had during the voyage, infectious disease on board
			By the Medical Officer	By the Sanitary Inspector			
Steamers ...	1	255	Nil	Nil	Nil	Nil	Nil
Motor ...	16	2078	3	8	Nil	Nil	Nil
Foreign Sailing ...	Nil	—	—	—	—	—	—
Fishing ...	Nil	—	—	—	—	—	—
Total Foreign ...	17	2333	3	8	Nil	Nil	Nil
Steamers ...	53	5389	1	3	1	1	Nil
Motor ...	101	7191	3	11	1	1	Nil
Coastwise Sailing ...	23	1462	—	12	Nil	Nil	Nil
Fishing ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Total Coastwise	176	14042	4	26	2	2	Nil
Total Foreign and Coastwise ...	193	16375	7	34	2	2	Nil

## **Character of Trade of Port.**

Passenger traffic, nil.

Cargo traffic.—Principal imports: Petroleum products, cement, grain, timber, sugar, steel. Exports: Coal.

Foreign ports from which vessels arrive:—Finland: Trangsund, Haminia. Lithuania: Memel. Sweden: Gefle. Belgium: Ghent. Holland: Rotterdam.

## **Source of Water Supply.**

(a) For the Port, Sandwich Town supply (Deep Well).

(b) For shipping, Town supply.

(c) Number of water boats, nil.

## **Infectious Disease.**

(1) Arrangements for detection of infectious disease on inward vessels.—All foreign, and all strange coastwise vessels are now visited regularly, and well-known coastwise ships occasionally. Arrangements are made with the Customs Officials and Harbour Master to notify the Port Medical Officer of any case of sickness on vessels.

(2) Arrangements for notification to the P.S.A. of the arrival of inward vessels requiring special attention.—Arrangements exist for the Customs Officials and Harbourmaster to notify the P.S.A.

(3) What vessels are boarded on arrival, by whom, where and how.—All foreign vessels; all strange coastwise vessels; and occasional inspections are made on well-known coastwise vessels by the Port Medical Officer and/or the Sanitary Inspector. Vessels are boarded as soon as berthed.

(4) Arrangements for disposal of cases of infectious disease and for observation or surveillance of contacts.—All cases of infectious disease are removed to the Infectious Diseases Hospital at Eastry, and quarantine arrangements exist at Richborough.

(5) Arrangements for disinfection of infected quarters, bedding, clothing, etc.—Fumigation is carried out by the Sanitary Inspector under the direction of the Port Medical Officer.

(6) Arrangements for cleansing of persons.—Carried out at the I.D. Hospital at Eastry.



(7) Arrangements for ambulance transport.—An ambulance is maintained by the Borough of Sandwich for non-infectious cases. Infectious cases removed by Eastry R.D.C. motor ambulance.

(8) Arrangements for detection and treatment of Venereal Disease amongst sailors.—No special arrangements made.

(9) Arrangements for bacteriological examinations of rats.—All bacteriological examinations are made by the County Medical Officer of Health at Maidstone.

(10) Arrangements for other bacteriological examinations.—As para. 9 above.

**Table C.**

Cases of Infectious Sickness landed from Vessels.

Disease	No. of cases during 1931		No. of vessels	Average No. for previous 5 years
	Passengers	Crew		
Nil	Nil	Nil	Nil	Nil

**Table D.**

Cases of Infectious Sickness occurring on vessels, but disposed of prior to arrival:—

1931           ...       ...       ...       ...   Nil

Previous 5 years ...       ...       ...   Nil

### **Measures Against Rodents.**

Steps taken for detection of rodent plague: (a) In ships in the Port.—Inspections by P.S.A. before and after unloading of vessel. (b) On quays, wharves, warehouses, etc., in the vicinity of the Port.—Routine inspections are made by the Borough Sanitary Inspector.

(2) Measures taken to prevent the passage of rats between ships and the shore.—No special arrangements made.

(3) Methods of de-ratisation: (a) Ships.—Evidence of rats was only found on two vessels (barges). In each case the master was given a supply of red squill biscuit. (b) Premises in the vicinity of docks or quays.—The rat population is kept under control by means of wire cage traps and cats the whole year round.



(4) Measures taken for the detection of rat prevalence in ships and on shore.—Visits of inspection made by Sanitary Inspector to ships and warehouses to search for evidence of rats.

(5) Rat proofing. (a) To what extent are docks, wharves, warehouses, etc., rat proof?—Principal quays are of stone and concrete construction, and afford little or no harbourage for rats. Warehouses are of brick or corrugated iron on concrete floors. Upper floors have open joists.

Action taken to extend rat proofing. (1) In ships: Nil. (2) On shore: Nil.

### **Rats Destroyed During 1931.**

#### **Table E.**

(1) On Vessels ...	...	...	...	Nil
(2) In docks, wharves, and warehouses	Nil			

#### **Table G.**

Particulars relating to plague “infected” or “suspected” vessels arriving in the Port during 1931.—Nil.

#### **Table H.**

Measures of rat destruction on vessels from Plague infected Ports arriving in the Port during 1931, and number of certificates issued in respect of such vessels.—Nil.

#### **Table I.**

Measures for rat destruction on Vessels (other than those included in Tables G and H), and number of certificates issued in respect of such Vessels during 1932.—Nil.

**Hygiene of Crews' Spaces.****Table J.**

Classification of Nuisances.

Nationality of Vessel	Number inspected during 1932	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British	26	Nil	Nil	Bugs 1 Dampness 1
Other Nations	8	Nil	Nil	Nil

**Food Inspection.**

(1) Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives in Food) Regulations, 1925 to 1927.—Nil. No articles of food arrive from foreign ports, and sugar only by coastwise traffic from London.

(2) Shell Fish.—Information respecting any shell fish beds or layings within the jurisdiction of the P.S.A.—Nil. There are no shell fish beds in the vicinity of this Port.

(3) Number of samples of food examined by.—(a) Bacteriologist: No samples taken. (b) Analyst: No samples taken.

I am, Gentlemen,

Your obedient Servant,

J. J. DAY,

Medical Officer of Health.



